

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of constructing wireless telecommunication cells between base stations and subscriber stations, the base stations each having a cell, the cell having a predetermined number of sectors, comprising the steps:

dividing each of the cells into four sectors around each of the base stations;

assigning distinct communication signals in a substantially mirror-image pattern respectively to the four sectors at each of the base stations so that a common one of the distinct communication signals is assigned to at least a pair of ~~adjeent~~-adjacent ones of the sectors of the corresponding two adjacent ones of the cells; and

transmitting within a predetermined directionality the assigned distinct communication singnals in each of the four sectors between the base stations and the subscriber stations in the corresponding cells.

2. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the subscriber stations are fixedly located in a predetermined one of the sectors in a predetermined direction with respect to the base stations.

3. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the sectors are substantially equal four areas.

4. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the sectors are substantially rectangular in shape.

5. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the sectors are substantially square in shape.

6. (original) The method of constructing wireless telecommunication cells according to claim 5 wherein the cells are substantially square in shape.

7. (original) The method of constructing wireless telecommunication cells according to claim 6 wherein the cells are staggered with each other.

8. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the sectors are substantially triangular in shape.

9. (original) The method of constructing wireless telecommunication cells according to claim 8 wherein the sectors are substantially equal four areas.

10. (original) The method of constructing wireless telecommunication cells according to claim 9 wherein the cells are substantially square in shape.

11. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein a number of the distinct communication signals is four.

12. (currently amended) The method of constructing wireless telecommunication cells according to claim 1 wherein the common one of the distinct communication signals is respectively assigned to two pairs of two ~~adjeent~~adjacent sectors of the corresponding two adjacent cells.

13. (currently amended) The method of constructing wireless telecommunication cells according to claim 12 wherein the common one of the distinct communication signals is assigned to four ~~adjeent~~adjacent sectors of the corresponding four adjacent cells.

14. (currently amended) The method of constructing wireless telecommunication cells according to claim 1 wherein the distinct communication signals are each a combination of distinct frequencies and ~~distiet~~distinct communication wave ~~directionalities~~directionalities.

15. (original) The method of constructing wireless telecommunication cells according to claim 14 wherein two of the distinct communicaiton signals are assigned to each of the sectors.

16. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the distinct communication signals are four distinct frequencies as denoted by F1, F2, F3 and F4.

17. (original) The method of constructing wireless telecommunication cells according to claim 16 wherein the four distinct frequencies have a relation as defined by $F1 < F2 < F3 < F4$.

18. (original) The method of constructing wireless telecommunication cells according to claim 16 wherein the four distinct frequencies have a relation as defined by $F1 > F2 > F3 > F4$.

19. (original) The method of constructing wireless telecommunication cells according to claim 1 wherein the four frequencies are assigned in order of F1, F4, F2 and F3 to the sectors of the cell.

20. (original) The method of constructing wireless telecommunication cells according to claim 19 wherein the four frequencies F1, F4, F2 and F3 are assigned to the sectors in a clockwise direction.

21. (original) The method of constructing wireless telecommunication cells according to claim 19 wherein the four frequencies F1, F4, F2 and F3 are assigned to the sectors in a counterclockwise direction.

22. (original) The method of constructing wireless telecommunication cells according to claim 19 wherein a first difference between F2 and F3 is larger than a second difference between F1 and F2 and a third difference between F3 and F4.

23. (currently amended) A wireless telecommunication system, comprising:

base stations for wirelessly communicating via a predetermined number of distinct communication signals;

four directional antennas located around each of said base stations for ~~receiving~~receiving and transmitting the distinct ~~communication~~communication signals within a predetermined directionality for said base stations, said four directional antennas collectively defining a cell for a corresponding one of said base stations, each of said four directional antennas singularly defining a sector for the corresponding cell, at least a pair of ~~adjeent~~adjacent ones of said four directional antennas of the corresponding two adjacent ones of said base stations utilizing a common one of the distinct communication signals in a substantially mirror-image pattern; and

subscriber stations located in the cell for wirelessly communicating with a corresponding one of said base stations on one of the distinct communication signals.

24. (original) The wireless telecommunication system according to claim 23 wherein said subscriber stations are fixedly located in a predetermined one of the sectors for transmitting one of the communication signals in a predetermined direction with respect to said base stations.

25. (original) The wireless telecommunication system according to claim 23 wherein said directional antennas define the sectors in substantially equal four areas.

26. (original) The wireless telecommunication system according to claim 23 wherein said directional antennas define the sectors in substantially rectangular areas.

27. (original) The wireless telecommunication system according to claim 23 wherein said directional antennas define the sectors in substantially square areas.

28. (original) The wireless telecommunication system according to claim 27 wherein said directional antennas define the cells in substantially square areas.

29. (original) The wireless telecommunication system according to claim 28 wherein said directional antennas define the cells in staggered relations with each other.

30. (original) The wireless telecommunication system according to claim 23 wherein said directional antennas define the sectors in substantially triangular areas.

31. (original) The wireless telecommunication system according to claim 30 wherein said directional antennas define the sectors in substantially equal four areas.

32. (original) The wireless telecommunication system according to claim 31 wherein said directional antennas define the cells in substantially square areas.

33. (original) The wireless telecommunication system according to claim 23 wherein a number of the distinct communication signals is four.

34. (currently amended) The wireless telecommunication system according to claim 23 wherein the common one of the distinct communication signals is assigned to two pairs of two ~~adjacent~~ adjacent sectors of the corresponding two adjacent cells.

35. (currently amended) The wireless telecommunication system according to claim 34 wherein the common one of the distinct communication signals is assigned to four ~~adjacent~~ adjacent sectors of the corresponding four adjacent cells.

36. (currently amended) The wireless telecommunication system according to claim 23 wherein the distinct communication signals are each a combination of distinct frequencies and ~~distinct~~ distinct communication wave-directionalities directionalities.

37. (original) Te wireless telecommunication system according to claim 36 wherein two of the distinct communicaiton signals are assigned to each of the sectors.

38. (original) The wireless telecommunication system according to claim 23 wherein the distinct communication signals are four distinct frequencies as denoted by F1, F2, F3 and F4.

39. (original) The wireless telecommunication system according to claim 38 wherein the four distinct frequencies have a relation as defined by $F1 < F2 < F3 < F4$.

40. (original) The wireless telecommunication system according to claim 38 wherein the four distinct frequencies have a relation as defined by $F1 > F2 > F3 > F4$.

41. (original) The wireless telecommunication system according to claim 23 wherein the four frequencies are assigned in order of F1, F4, F2 and F3 to the sectors of the cell.

42. (original) The wireless telecommunication system according to claim 41 wherein the four frequencies F1, F4, F2 and F3 are assigned to the sectors in a clockwise direction.

43. (original) The wireless telecommunication system according to claim 41 wherein the four frequencies F1, F4, F2 and F3 are assigned to the sectors in a counterclockwise direction.

44. (original) The wireless telecommunication system according to claim 41 wherein a first difference between F2 and F3 is larger than a second difference between F1 and F2 and a third difference between F3 and F4.

45. (currently amended) A wireless telecommunication system, comprising:

base stations for wirelessly communicating via ~~four~~ distinct communication signals;

~~four~~ a plurality of directional antennas located around each of said base stations for ~~receiving~~ receiving and transmitting the ~~four~~ distinct ~~communication~~ communication signals for said base stations, said ~~four~~ directional antennas collectively defining a cell for a corresponding one of said base stations, each of said ~~four~~ directional antennas having a limited directionality for singularly defining an equal one-fourth portion of the cell as a sector, a pair of ~~adjeent~~ adjacent

ones of said ~~four~~-directional antennas of the corresponding two adjacent sectors of said base stations utilizing a common one of the ~~four~~-distinct communication signals in a substantially mirror-image pattern; and

subscriber stations located in the cell for wirelessly communicating with a corresponding one of said base stations on one of the distinct communication signals.

46. (currently amended) A wireless telecommunication system, comprising:

base stations for wirelessly communicating via ~~four~~-distinct communication signals;

a plurality of ~~four~~-directional antennas located around each of said base stations for ~~receiving~~receiving -and transmitting the ~~four~~-distinct ~~communicaiton~~-communication signals for said base stations, said ~~four~~-directional antennas collectively defining a cell for a corresponding one of said base stations, each of said ~~four~~-directional antennas having a limited directionality for singularly defining an equal one-fourth portion of the cell as a sector, ~~four-the plurality of said of~~ adjacent ones of said ~~four~~-directional antennas of the corresponding ~~four~~-adjacent ones of said base stations utilizing a common one of the ~~four~~-distinct communication signals in a substantially mirror-image pattern; and

subscriber stations located in the cell for wirelessly communicating with a corresponding one of said base stations on one of the distinct communication signals.

47. (currently amended) A wireless telecommunication system, comprising:

base stations for wirelessly communicating via ~~four~~-distinct communication signals;

~~four-a plurality of~~ directional antennas located around each of said base stations for ~~receiving~~receiving and transmitting the ~~four~~-distinct combinations of frequencies and polarized waves for said base stations, said ~~four~~-directional antennas collectively defining a cell for a corresponding one of said base stations, each of said ~~four~~-directional antennas having a limited directionality for singularly defining an equal one-fourth portion of the cell as a sector, ~~four-the~~

plurality of said ~~adjeent~~-adjacent ones of said ~~four~~-directional antennas of the corresponding ~~four~~ adjacent ones of said base stations utilizing a common one of the ~~four~~-distinct combinations of the frequencies and polarized waves in a substantially mirror-image pattern; and

subscriber stations located in the cell for wirelessly communicating with a corresponding one of said base stations on one of the distinct communication signals.